

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,010	05/08/2000	FREDRIK WINQUIST	BERGLUNDSP9	4135
7:	590 12/21/2001			
HAYES SOL	OWAY HENNESSEY		EXAMINER	
GROSSMAN & HAGE 175 CANAL STREET NAMESTED NIL 22121			HANDY, DWAYNE K	
MANCHESTER, NH 03101			ART UNIT	PAPER NUMBER
			1743	
			DATE MAILED: 12/21/2001	S.

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No. 09/508,010

Applicant(s)

Winquist tal.

Examiner

Dwayne K. Handy

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Th MAILING DATE of this communication app	ars on the cov r sheet with the correspondence address				
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
<ul> <li>Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days,</li> </ul>	ation.				
be considered timely.	eriod will apply and will expire SIX (6) MONTHS from the mailing date of this				
- Failure to reply within the set or extended period for reply will, by s	statute, cause the application to become ABANDONED (35 U.S.C. § 133). mailing date of this communication, even if timely filed, may reduce any				
Status					
1) 🛛 Responsive to communication(s) filed on <u>May 8</u>	8, 2000				
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle35 C.D. 11; 453 O.G. 213.					
Disposition of Claims					
4) 🗓 Claim(s) <u>1 and 6-20</u>	is/are pending in the applica				
4a) Of the above, claim(s) <u>19 and 20</u>	is/are withdrawn from considera				
5)	is/are allowed.				
6) ☒ Claim(s) <u>1 and 6-18</u>	is/are rejected.				
7)	is/are objected to.				
8) 🗓 Claims <u>1 and 6-20</u>	are subject to restriction and/or election requirem				
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on	. = -				
11) The proposed drawing correction filed on	is: a pproved b) disapproved.				
12) The oath or declaration is objected to by the Example 12.	miner.				
Priority under 35 U.S.C. § 119					
13) $\overline{\mathbf{X}}$ Acknowledgement is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d).				
a)⊠ All b) ☐ Some* c) ☐None of:					
a/A All b) - Some c) - I volle of.					
Certified copies of the priority documents have	ave been received.				
<u> </u>					
<ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority application from the International Bur</li> </ol>	documents have been received in this National Stage reau (PCT Rule 17.2(a)).				
<ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority</li> </ol>	ave been received in Application No  documents have been received in this National Stage reau (PCT Rule 17.2(a)). the certified copies not received.				
<ol> <li>Certified copies of the priority documents had</li> <li>Certified copies of the priority documents had</li> <li>Copies of the certified copies of the priority application from the International Bur</li> </ol> *See the attached detailed Office action for a list of the priority application from the International Bur	ave been received in Application No  documents have been received in this National Stage reau (PCT Rule 17.2(a)). the certified copies not received.				
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<ol> <li>Certified copies of the priority documents hat</li> <li>Certified copies of the priority documents hat</li> <li>Copies of the certified copies of the priority application from the International Bur</li> <li>*See the attached detailed Office action for a list of the standard of the certified copies of the priority application from the International Bur</li> <li>Acknowledgement is made of a claim for domest</li> </ol>	ave been received in Application No  documents have been received in this National Stage reau (PCT Rule 17.2(a)).  the certified copies not received.				

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 and 6-18, drawn to a device and method of measuring using pulsed electrodes.

Group II, claim(s) 19-20, drawn to pump cell for directing brushes across electrodes.

- 2. The inventions listed as Groups I and II do not relate to a single general inventive concept—under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the technical feature that they share the electrodes are well known measuring devices as shown in the references Lewandowski et al., Ahnell, and Lewis et al.
- 3. During a telephone conversation with Mr. Nick Soloway on 12/13/01 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-20 are

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withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation of the electrodes being placed "so in relation to each other that the electrodes influence each other..." This is unclear. What structural or chemical relationship is required between the electrodes to insure that they "influence" the neighboring electrode? How does each electrode "influence" its neighbor? Is it a chemical

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influence? Does the electrode touch the next electrode? How are they related and how does this lead to one electrode "influencing" another?

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 6, 7, 9 and 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewandowski et al. (U.S. Pat. No. 4,897,162). Lewandowski teaches a glucose sensing apparatus and methods for operating the device. The basic method involves providing voltage signals at varying levels between a reference electrode (10) and a sensing electrode (12) (column 4, also Figure 12). In addition to voltage, Lewandowski also recites using measurements of amplitude, frequency and varying wave shapes in claim 1. Varying waveshapes is also menitioned in column 5, lines 38-55. The use of superimposing (overlapping) pulses and cyclic switching, as well as a pulse frequency of 200 hertz is discussed in column , lines 3-57 and column 7, lines 16-54.

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#### Inventorship

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

### Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewandowski et al. in view of Lewis et al. (5, 571,401). Lewandowski, as described above in paragraph 8, teaches every element of claims 8 and 10 except for the two dimensional response pattern and a number of different electrodes arranged in a manner to influence the sensor result. Lewis teaches a sensor array which detects fluids based on resistance measurements from

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electrodes. The measurements are represented in two dimensional form (Figure 3) and even

three dimensional form in certain embodiments. Lewis also teaches that these electrodes work

together in an array to provide the measurements (col. 2). It would have been obvious to one of

ordinary skill in the art to add the teachings of Lewis to the method/device of Lewandowski. The

arrangement of the electrodes and subsequent response pattern produced by Lewis allows for a

more distinct measurement of an analyte. This would be advantageous when measuring a

sample.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner 12.

should be directed to Dwayne K. Handy whose telephone number is (703)-305-0211. The

examiner can normally be reached on Monday-Friday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jill Warden, can be reached on (703)-308-4037. The fax phone number for the

organization where this application or proceeding is assigned is (703)-772-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)-308-0661.

dkh

December 17, 2001

Supervisory Patent Examiner

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